

PATHWAYS

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"MOVING" EDUCATION

CONCLUDING PART

A class VII teacher regularly getting 'Pathways', was amazed at the possible ways the teacher could create in teaching, - be it teaching Science, Maths or Language - to reach any age-group of children. But one thing that really stunned her was bringing movement into teaching History, Civics and Geography, in other words, her query was *"how can Social Studies be connected to movement? They would be like oil and water where no mixing takes place!"*

Well, before we really plunge into the movement exercises for social studies, it'd be generally helpful to dwell for a while on some relevant issues related to this 'subject'.

* Are History, Civics & Geography merely the components of Social Studies ?

Well,.....some nostalgic memories associated with Social Studies are rote memorising dates, trying to remember maps, capitals of countries and of course by-hearting the functions of 'Municipal Corporation' or the Rajya Sabha ! Are these really History, Civics and Geography? If it is so, how would this help make our contribution as citizens of this country towards our social world ??

There is much more to Social Studies than merely teaching/learning to remember dates and capitals !

In other words, Social Studies is a specially designed area of study, to help children develop into intelligent responsible, and self-directed people

through the contents of History, Civics and Geography and relevant experiences, as a result, help him/her function as members of the groups, family, community or world, with which they become identified !

To be specific, we could state the **behavioural objectives of Social Studies** as :-

1. Students would be able to experience and understand more about people and their relationships to each other and to their environment.
2. Students would be able to experience and thereby nurture human dignity and build a respect for human life with an appreciation for the rights of others and personal property.
3. Students would be able to experience and acquire knowledge and skills necessary for the survival of individuals, groups, democratic ideas and for life itself. They'd also be able to experience, appreciate and respect interdependence of self with peers and adults at school, home, in the neighbourhood and in the community.
4. Students would be able to experience and make choices relevant for themselves about important economic, political and social issues.
5. Students would be able to lead richer, more satisfying and more personally fulfilling lives, by relating, playing and working with others of

various religions, races, nationalities and children from all kinds of background.

Thus, an important goal of education is to help children grow beyond concern for themselves alone, toward a concern for others and knowledge of the social world in which they live.

Learning about people, how and where they live, how they form and structure societies, how they govern themselves and provide for their material and social needs, how and why they hate each other, how they use and misuse the resources of the planet that is their home - all this is what Social Studies education is really about -

J.Jarolimiek

*** Do the current topics, and teaching practices meet the goals of Social Studies ?**

The topics taught and used today are to be the means that'd enable to reach the above mentioned objectives. This leaves us with questions as :

: Are the current teaching strategies adequate so as to reach these objectives? Are we relating these topics by satisfying the students/groups' dominant sensory modalities ? Are we providing a means and an environment of primarily inducing joy and challenges in the classroom rather than primarily remembering dates and maps?

: Are we as teachers for Social Studies sensitive to these? What possibilities do we create in our classes for this?

: Can we extend our teaching skills and strategies to bring alive Social Studies in our classrooms and create a genuine interest to know more about ourselves, others, the origin & progress of our nation an institution, our world, & ways and means of 'live & let live' !?

: Can we introduce experiences and activities that will enable students to remember important events, dates and maps thereby making Social Studies a joyful area of learning ?

: Can we through various strategies and skills, create an environment and provide experiences to help children relate what they grasp in the classes to their immediate environment, and further make their contribution towards the Social world ?

: Are we consciously using some of the following examples of experiences to be experienced as a part of Social Studies, so that, we internalise that.....

.....each person has worth and dignity; we are all alike and yet not all alike.

.....rules can help us live happily together, and therefore, we respect rules and regulations.

.....festivals are a means of getting together, being together and sharing and enjoying together. They are a very personal affair. Festivals and religious practices can be celebrated without pomp and disturbance to others.

.....people live in other countries. People are different; not necessarily that one is better than another.; people live according to certain values, skills and traditions;

.....money is a means to buy food, clothing and equipments so, these items can be used freely but without waste. Thus we must learn to respect our personal property and also public property. Similarly water and food have several uses. Water can and should be conserved.

.....water and air can be polluted. Many familiar sounds cause noise pollution. Waste disposal is a severe problem.

.....money is used to buy what we need.

.....people do different kinds of work, therefore, we need to appreciate their contribution towards us. People live in different types of homes and thus empathise with how others live.

.....great men and women had great ideas. They were honest, brave, and kind. An event is a part of a chronological series. Simple time relationships exist. Our society changes.

.....family is the basic social unit in our society. All families are not alike.

In essence, the learning of social studies is so vast that it covers a number of experiences related to other areas, as Moral Education, Conservation, Economics, Anthropology, International understandings, Sociology and Ecology! Any learning related to these necessarily must be experiential for "real learning" to take place. In other words, in addition to the intellectual grasp of the matter being taught, there must be some affective experiences for these to become a part of them, thereby, helping them to practice these with simplicity and ease.

Below are some possible "moving" exercises/situations related to learning in Social Studies which could be consciously created by the teacher in the class, so as to enable them to learn or reinforce or practice, imbibe some of these as a part of their personality, and make it a way of life:-

1. I shall write a list of community helpers on the board as you name them. (Policemen, postmen, doctors, teachers, electricians, parents, sisters, brothers, vegetable vendors, store keepers, newspaper carriers, etc.). Pick one of these helpers and describe the helper through movement. Think of the special thing your helper does and include that in your movement. Who are the people in other communities that help us? (*This obviously would depend on the type of community the student lives in - urban or rural - like, farmers, scientists, construction workers, bakers, soldiers, judges, etc.*) Can you think of the special things each of these people do? Pick one person and describe his or her occupation through movement. Let's try to guess each occupation being described.
2. Are there jobs in India that do not exist in other countries? Does every country have astronauts, presidents, coal miners, etc. Describe one through movement. We will make a list of the occupations you portray and discuss what countries do not offer these jobs and why. We will also discuss countries that do offer the same jobs. Are there any jobs that are common to all countries? Think of one and describe it through movement. We will make a list of the jobs described and discuss the importance of them, parents, doctors, etc. Were there occupations in our ancestors' time that we no longer see today or that have changed somehow, like slaves, buffalo hunters, shoe-makers, potters, (*the latter two being a disappearing tribe with increased similar industrial products available*), etc. Think of one and describe the occupation through movement. Then we will guess it and discuss the reason it has changed or no longer exists. (in the discussion it would be wise to show some positive changes with the occupations as rickshaw pullers, scavengers, etc. disappearing).
3. Can people have more than one occupation? Who do you know has more than one occupation? Think of all the occupations your person has and describe each one through movement for the class. We will discuss the various occupations people have and their significance.
4. Can you think of transportation that is found on water? Describe a type of water transportation through movement. Let's make a list of the types being shown. Can you think of any other vehicles that move on water? Describe another water vehicle through movement. Choose one that is very important from your list. Let's look at these second choices and add them to our water transportation list.
5. Many types of transportation are run by motors. Can you think of types of transportation that do not have motors to make them run, like, animals transport us. Can you name animals that people use for transportation? Think of animals in other countries besides our own. Do you know what children ride in the deserts? In America, Africa? Now choose one that interests you to describe through movement. You might be the animal, the driver, the rider, or the vehicle being pulled by the animal. We will guess the responses when everyone is ready. Besides animals, we have other kinds of motorless transportation. Can you think of any, like cycles of all kinds, wagons, rowboats, sailboats, etc. Describe one kind through movement. Let's guess the solutions and discuss their usefulness for long or short trips.
6. Instead of describing a vehicle through movement, describe the actions of a driver of a certain vehicle. How does the driver of a bus handle the bus? What level is he or she on when driving? What things does he hold? Show me. How does a rickshaw driver handle a rickshaw? Where does he stand in relationship to the vehicle? What level is a rickshaw driver on? Show me. How does a ship's captain drive a ship? Show me the level the captain works at and the actions of his or her arms. How does a cyclist handle a bicycle? What is different about a motorcyclist? Can you show me? (*This can be continued using other vehicles. There will be a need to have a discussion of the vehicles or show pictures before the children move*).
7. (After dividing the class into groups and each group given a card with a location written on it on land; on water; under water; like in the air; in the mountains; in the desert; in cities; on farms; in villages, etc.), Think of one kind of transportation found in your locality and work together to describe the size, shape, movements, directions and the speeds of that transportation. When everyone is ready, we shall look at the groups solutions and discuss what we see.
8. What is the name of the group that you were born into? (The family.) Show me how many members belong to your family group by making the shape of the number with your body. How many adults are in your family? How many children? How many parents? sisters? brothers? grandmothers? grandfathers? uncles? aunts? cousins? nieces?

nephews ? babies ? pets ? Does anyone have someone else in his or her family group that I did not mention ? Tell us about that to your peers.

9. I shall ask you some true and false questions about family groups. If the answer is true, make the shape of a 'T' with your body. If the answer is false, make the shape of an 'F'
 - a. All family groups have the same number of people in them. [F]
 - b. The members of your family can live apart and still belong to your family. [T]
 - c. A family must have pets before they can be a family. [F]
 - d. Everybody has a family. [F]

(Here, we could also bring in sensitive issues such as death, adoption and birth of a family member and discuss each statement before going on to the next one).

10. You belong to a family group. What other groups do you belong to ? Make a list of all the groups you belong to like, scouts and guides, school groups, hobby groups, etc., or, draw a picture of each group. Choose one group to portray through movement. We will watch each person in the class describe his or her group. Guess the name of the group and check your list. Do you also belong to that group?
11. Divide the class into groups. Each group think of a type of group that adults belong to. Describe that group through movement.
12. How are groups organized ? How do leaders emerge ? How do people get along in groups ? Let's do some exercises that will help us find these answers. Walk around the room. When I give the signal sound, form four straight lines standing shoulder-to-shoulder.That took time. Could you do it faster ? Walk around again. On the signal, form four straight lines standing shoulder-to-shoulder. That was faster. What are some things you can do to get organised quickly ?- Letting people in line; people could say 1st, 2nd, 3rd, 4th and raise their hands to indicate line leaders; or if you are standing, you could move quickly to a formed line.)
13. *(Divide the class into groups).* Do groups working together always agree ? Can you think of groups in our community that sometimes disagree ? *(Students and teachers, children and parents, employers and employees, teammates and umpires or referees are some possible answers.)* Think of some

larger groups that sometimes disagree, like, political parties, religious groups, governments, etc. Now, I shall give each of your group a card with a situation written on it. Describe your situation clearly through movement. The first groups situation would be as, two groups arguing, cannot reach an agreement, yet, leave peacefully; The second groups situation would be portraying as two groups arguing, cannot reach an agreement and this is followed by a mock battle; the third group would describe two groups arguing, reaching an agreement and leaving together; the next group would have to demonstrate two groups arguing, no agreement reached, but several members of the groups switch sides; the fifth groups situation is two groups arguing, another person enters, talks to both the groups and brings them together; the sixth groups situation being the same as the earlier one, exception being that the groups do not come together; the next group could be showing through movement two groups arguing while a third group is watching, the two groups do not reach an agreement, and members of the third group join the first and second groups until only two groups remain; the last group would be describing through movement two groups arguing and a third group being formed by members of the first two groups. *(After the situations have been demonstrated they could be discussed and related to actual events in every day life).*

14. Customs are the practices people in a group have been following for many many years. Can you show me through movement a custom that your family has at mealtimes. Lets' look at the solutions when everyone is ready and discuss the different customs being shown.
15. Can you show me through movement what are some ways of showing respect? Let's look at your solutions and discuss them. *(here the teacher has to make special efforts to clarify that showing respect is a greeting, is a form of expressing love, acceptance and affection for a peer/ elder/youngster, and it is expressed gesturally/bodily/verbally, by varied people, and respect is not fear, not one that is shown only to elders, not one that should be used to get things done and definitely not a means of punishment).* Let's look at your solutions and discuss them. Also let us find out how children in other countries show respect.
16. Now show me customs you have regarding holidays. Show me through movement what are some customs related to Holi? Also show me some customs related to Independence Day, Divali and Christmas. Does everyone in India celebrate these holidays? What are the other holidays celebrated in our

***Religion has no one definition that is generally accepted. However, religion is man's attempt to achieve a distinct entity and the highest possible good by adjusting his life to the strongest and best power in the universe. This power is generally referred to as the God. In other words, religion, strictly speaking is defined, as looking within oneself. In this sense, each individual seeks his own ways and beliefs to do this. Thus, each person follows a religion. Hinduism, Sikhism, Christianity, Islam, Jainism, Buddhism, and so on, are different roads to reach this ultimate - seeking to discover the truth about oneself. All these practices and disciplines of seeking the Ultimate, are organised systems of beliefs based on traditions and teachings. The existence of these "isms" is recognized more for distinct identification of a particular practice and belief, to recognise and appreciate the powers that lie outside the normal means used for controlling our environment, and thus affecting life.**

country? Where did these holidays originate? (They should be allowed to find out and later this must be discussed in the classes). Why do we celebrate them here? (here the appropriate emphasis must be related to the origin of the celebration, and the teacher must consciously refrain her/himself from attributing the festivals and their celebrations, to the "isms" of the religions*, per se, for factually, they may have relation to these "isms", most commonly known as Hinduism or Sikhism or Islam or Christianity, and so on. But, it would be interesting to know that these festivals originated from a group undertaking who followed a specific practice and discipline, based on their beliefs and values, (which we know as religions), in order to acknowledge certain powers that affect our life and lie outside our normal means that we use for controlling our environment. For e.g. Divali the most known and elaborately celebrated "Hindu" festival is originally a symbol created for the triumph of the light of truth over the darkness of falsehood, the victory of knowledge over ignorance, evil and wickedness. Strictly speaking, a group of people who "believed" in one practice and discipline of "seeking the truth", known as Hindus, began this celebration. The same goes for Christmas, Eid, and most of the "so-called" religious festivals. Other than those festivals that originated from the religious background, there are innumerable number of festivals that is connected with seasonal changes, national festivals, etc.

Many of the festivals that started as a social celebration sometimes degenerate into sectarian one's. For example, today "we" have begun to celebrate "Ambedkar Jayanti" or "Shivaji Jayanti". We know that Ambedkarji was creditably responsible for the welfare of a class of people and well-known as a national leader. However, with a temple built for him and observing a National/State holiday to commemorate his birthday, for this courageous task, there is a possibility that, eventually and gradually, our future generation may turn Ambedkarji as one of the "Gods"! Moreover, his followers over the years may term it to be a "religious" festival!! Therefore the essence that needs important and explicit communication on festivals and its celebrations are making them sensitive to the real facts, and the message of the victory of righteousness, courage, honesty, bravery, humaneness, leadership, etc., all of which are earned hard by man's efforts. Moreover, these kinds of celebrations bring people together in a free and uninhibited manner). Do children in other countries celebrate any of the same holidays as you do? Find out which holidays you share with other countries and which holidays you do not share. Find out the reasons behind your answers. Find out the customs regarding holidays in other countries and describe these customs through movement for the others.

17. Can you describe through movement a cultural trait that you share with a friend? (A cultural trait is a part of a way of life that is learned, like, reading, writing, playing sports, going to school, and so on. They can be learned vicariously or consciously from parents, friends, teachers, media, making mistakes, observing others, etc.). Let's look at everyone's solutions and make a list of the cultural traits being shown. Now think of another trait and describe it through movement, which we shall add to our list. How did you learn these? Now let's describe through movement some cultural traits of your parents that you will learn some day, like, going to work, rituals, rearing-practices, etc., and then let's discuss these traits being shown. Can cultural traits ever be changed? Can you show me one new cultural trait you would learn if you moved from Bombay to Delhi, or from a city to a hill station? Why would you learn this? Would you have to change all your cultural traits? Can you describe through movement those cultural traits that might be the same in both the environments? (P.N.: Some of these situations/questions, as above, are not cited so as to do them all together. These are simply ideas for the teacher to adapt and adopt when the need arises.)

18. What does Holi celebrate? (end of winter, onset of

spring, colourful flowers, distinct flora and fauna). Through movement show me some symbols of Holi. (colours, water jet pumps, having fun, etc). Let's look at the different solutions and discuss the meanings behind these symbols. Can you find Holi customs from other states and describe them through movement?

19. What comes to your mind when I say Divali? Show me one thing, at a time. Show me something that doesn't move. Let's make a list of Divali things. Each one of us now shall think of a present we would want to receive on Divali. Let's then make the shape, size and movement, of that present. We shall look at them and guess what they are. Now think of a present you would like to give to someone. Show the present through movement and we will make a list of these presents. *(here we can also have them write their own lists for practice in vocabulary and speaking skills).*
20. What does Divali celebrate? Could we re-enact the first Divali? What characters do we need? What is the setting? What emotions do you express around Divali? Show me, using your whole body. What are your reasons for feeling this way? What is the weather like? What objects or animals are needed? Show through movement, what are some of the activities you do to prepare for Divali? Also describe through movement, what are some of the activities you do on this day? Does everyone in the class do the same things? Do you do them at the same time? Let's share some of our family Divali customs with each other. Do people in other cities/states/countries celebrate Divali? Which people in which states celebrate Divali? Do they celebrate Divali the same way we do? Can you find out different Divali customs from other lands to describe through movement. *(Similarly, other holidays, including birthdays, and holidays from other States/countries could also be discussed, focusing on its origin, meaning of the holiday, activities associated with it, symbols, another city/state/country customs for it, emotions associated with the holiday and stories and poems related to it).*
21. *(Showing various pictures of the environments during the different climates),* I shall show you a picture of people living in the desert. Look at it carefully. Now describe through movement one thing that is in this environment that is also in your environment. Also describe something that is different. Then let's try another environment.
22. People have to learn to adapt to their environment in order to survive. I shall give each group *(Divide the class into groups)* a card that describes a situation where people had to adapt to a new environment. Think of the different ways the people had to adapt to the new environment. Did their means of transport change? Did they have to find different ways to prepare food, clothing, and shelter? Did their occupations change? Describe through movement these adaptations. When everyone is ready, we shall look at each group and discuss the ways in which people had to adapt to a new and different environment.
23. We people can change the environment in ways that are harmful if we are not careful. Can you think of one way we can harm the environment? Describe your idea through movement. Can you think of any other way? Let's look at some of the ways we discovered and then discuss their significance.
24. Let's perform an experiment to explore the concept, that our environment not only affects our physical needs, but also affects our emotions. I shall divide the class in two groups. One group will be the trees and the other will be forest guards. The "tree" group will decide what type of trees you are, say, a banyan or a pine, or a Ashoka, or a bush, and so on. When you have a shape in mind, find a space in the room far away from everybody and form the shape of your tree. The "forest guards" group will move about quickly (trying different ways of moving), about the room, counting the trees and check the trees for any disease or infection. *(The teacher gives them a minute or so to do this, giving a signal sound to stop).* *(After a minute),* now, something strange has happened to the forest. It has shrunk. All the trees will come to this area, *(which is marked off four feet by four feet)*. Make the shape of your tree selected, and freeze in a shrunk forest. The guards shall again move about the forest as quickly as possible, however, not touching any trees or other guards. *(This would go on for a minute or so, again giving the signal sound to stop).* Now we shall repeat this experiment by switching roles. This activity has tremendous scope for a follow-up discussion, where questions as these could be posed: When you were rangers what kind of movement were you able to do in the big forest? Did your movements change in the shrunk forest? How? How did you feel in the big forest? How did you feel in the shrunk forest? and so on discuss questions as follows, and create an empathy about the current situation of our country, thereby making their contribution towards it: - How do you feel walking in a busy city? How do you feel walking in a place where there is ample space? How do you think ten people feel living in one room? Have you ever been in such an environment? Describe through movement this environment and how it affected you.

25. Knowing that the land is one of our biggest natural resources, its soil and minerals producing many goods for us to use, can you describe through movement foods that are products of the land? Let's look at some of the different foods the class is making and make a list of foods. Now, can you describe through movement similarly, the clothing that comes from our land. Later we shall make a list from your ideas. Think of what comes from the land that is used to build homes, and then describe one building material through movement. You can see by looking at our lists how valuable a resource the land is.
26. Find a partner, and think of a product and the natural resource of that product. One of you make the shape of the product and the other make the shape of the natural resource. When everyone is ready, we shall look at the pairs and guess the product and the resource. *(This can be varied by giving cards to the two groups of the class, with the names of the products and natural resources written, or, the products and natural resources illustrated, one each to the two groups respectively. Every student has to describe his card through movement and try to find the person with the matching product or natural resource card in the other group).*
27. As you are describing some Indian customs through movement, I shall make the list of customs on the board. Now, describe a home or a school rule through movement, and I shall write the list of rules. Similarly, can you think of one law and describe through movement. Let's look at our lists now. We shall try to find out the difference between a custom, a rule and a law. Unlike rules which are conscious decisions for directing group members, a custom is an unconscious decision based on habit and tradition, and laws are rules for community members.
28. Knowing that some laws protect people and some laws protect property, try describing through movement something that portray a law protecting people, like traffic rules, and later we shall make a list of these. Now, try demonstrating through movement things that describes a law that protects public property. Let's look at each others' descriptions and make a list of laws protecting property.
29. There are different forms of government/management, one of them being anarchism. In this form individuals and private groups govern one's own affairs for themselves, irrespective of their concern for the society. There is absence of government and laws. Can you imagine what would happen if everybody could make up their own rules and laws? Now each group will attempt to describe one thing that might happen in an anarchy that usually does not happen in a democracy like we have here. We shall discuss your solutions and the problems that arise in an anarchy, later. *(Alternatively we can also assign events or incidents like in schools, offices, homes, etc.).*
30. Let us discuss the form of government that is opposite to anarchy, i.e., totalitarianism, where in the powers that rule makes up the laws governing everything, like, the family, voting, choosing your job, etc. Here you would have no liberty to even make any choice or decisions that direct your life. There will be a group of people who will make all the decisions for you. Think about this for a minute and how would you feel living under such a government. Describe through movement how this would make you feel, which we shall discuss later.
31. The most common form of government in most of the counties today is democracy. Here the people choose the rulers by voting/electing the form of government. These chosen people are responsible for accounting their actions to the public. People have got a right to remove them from power. The decisions regarding laws, rules, etc., are taken on a collective basis by the elected representatives for the betterment of society. Our country is a democratic country. Right from the Central Government to the State Governments and even at the Panchayat level we work in a democratic pattern. Think about this for a while. What do you think are the advantages and disadvantages of such a system. Describe through movement and we shall list them down as we guess. Now I shall give each group a situation, which you will describe through movement. One group will describe the voting system of the country. The second group will describe the situation wherein a major decision has to be taken as a group about how to keep the city free from garbage and filth.
32. As I name some states of the Union, if you think that State covers a large area, make a big body shape. If you think it covers a small area, make a small body shape. If you think it is medium-sized, bend over so your head is on a medium level. As I see your shape, I shall point to the state on the map and show you how it sizes in relation to the other states.
33. How quickly can your group spell out the name of the largest state, using body shapes. If you feel you have less members to spell the whole, form as many letters as possible. Can you use strong muscular shapes to spell the second largest state. Try using very small shapes to spell the smallest state in the Union.
34. Can you demonstrate through movement some

states' pet names through movement? Show me Bangalore's pet name (The City of Gardens), Bombays' (The Industrial Capital).

35. Quickly answer my questions by making the correct number with a body shape? How many States' names begin with the letter M? Can you name them? How many states' names begin with the letter W? Name them.
36. I shall give each group, (the class being divided into groups of say 6/7/8 people), a card on which a state capital is written. Spell the capital with body shapes. When everyone is ready, we shall look at the solutions and try to guess the state whose capital is being spelled out. If you have less members in your group to spell the whole word, try forming as many letters as you can.
37. Each group will choose a state as a project for research, wherein you will find out the capital, chief products, natural and man-made land marks, famous people and important events. After your research is completed, work together to produce a state scene. Describe your research through movement, by forming the outline of the state, spelling the capital, depicting some significant historic events, showing the shapes of the chief products, and describing important lakes, rivers or mountains.
38. Looking at the map of India, each group will choose a State, and form the outline of that state by lying on the floor, head to toe, and then by standing up with arms out stretched, sitting down, kneeling

down, or by using a combination of these. You may attempt various ways and choose one, after which we shall look at each group and guess which state the group is making.

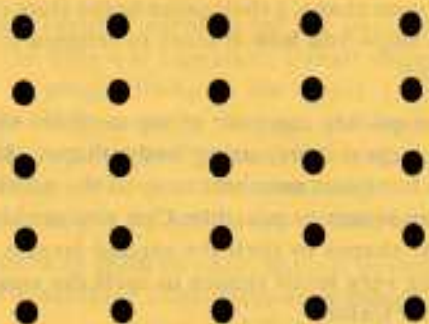
39. Describe through movement, some of the chief products of the states. For what product is Punjab famous, show me using body shapes. What is one of Bihar's chief products? (This can then continue for other countries and states).

It would be rather astonishing to note how Social Studies could be brought alive in the class rooms, and make it an enjoyable, meaningful experience, and also can enhance the retention for the important events and of course motivate us strive to become useful and trouble-free citizens of the social world.

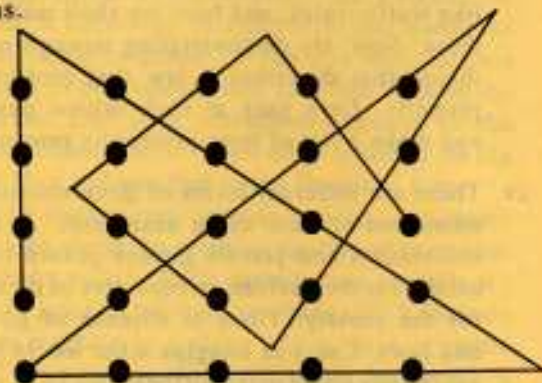
It is important to note that this approach of encasing on "embodying" the various disciplines/ subjects in schools should become a way of teaching all concepts. Some teachers may be enchanted with this approach and use these sparingly, and "may" or "may not" find it producing the types of results we are expecting from them. This may be because it has been "lifted" out and used in "isolation". Hence it may or may not make sense to them. In other words, what is being implied here is that the teachers first of all must spend time to make this as a part of themselves, feel comfortable planning them and then implement them with the students. For more details and skills necessary for this, the teachers may refer to the source book, "Teaching the three Rs" through Movement Experiences, by Anne Green Gilbert, Macmillan published, 1977.

TRY YOUR HAND

Can you join all these dots with eight straight lines without taking your hands off from the paper.



Here is one solution : Find out other possible solutions.



INTEGRAL PEDAGOGY : A PRACTICAL APPROACH TO INTEGRAL EDUCATION

For the past fifteen years, the Jesuit Society world wide were searching for ways to renew their schools and the education practices world wide. In this late 20th century, they are reviewing their present teaching strategies and planning for the education and modernisation of the teaching practices for the 21st century. During these fifteen years of their search, they have experimented with different strategies.

The first was the "colloquium on the teaching ministry". In most of their schools they have organised "colloquium" aiming at making the teachers realise the goals of education, creating a commitment to teaching-learning process, developing competence of teachers in their relationships with students, colleagues and management. It was mainly aiming at creating a heart-to-heart dialogue within the school between teachers, between teachers and management, between teachers and parents, between teachers and students.

As a second step, they started working on **Curriculum Improvement Programme**. The stress in this curriculum improvement programme was to look into the school practices, activities and the structure to make sure that the children getting out of these schools must be integral persons with development of the total personality, having a commitment to society and not mere academic giants. These reflections and dialogues have given rise to a lot of social work activities aiming at the development of students as persons possessing a commitment for leadership for service. These dialogues gave rise to formulate a vision for the schools and as a result they formulated the "Characteristics of Jesuit Education". In other words a document on "Characteristics of a student" that comes out of a Jesuit School was formulated.

Thus the mission of the society of Jesus today as a religious order in the catholic church is the service of faith of which the promotion of justice is one essential element. It is a mission rooted in the belief that a new world community of justice, love and peace needs educated persons of **competence, conscience and compassion**, men and women who are ready to embrace all that is fully human, who are commitment to working for freedom and dignity of all peoples, and who are willing to do so in cooperation with others who are equally dedicated to the reform of the society and its structures.

It calls for persons educated in faith and justice, who have a powerful and ever growing sense of how they can be effective advocates, agents and models of justice, love and peace within as well as beyond the ordinary opportunities of daily life and work.

Once the characteristics of the students were formulated, the search was on for the methodology/strategies of teaching-learning which will help the teachers to achieve these objectives.

In their search for a pedagogical model (paradigm) for a best practical method to promote this mission, they found something very helpful, (in their own documents) the three words "constant interplay of **experience, reflection and action**" which is the corner stone of the Jesuit formation. These three words: **experience, reflection and action** lie at the centre of the teaching model articulated in this **Integral pedagogy** which they called it the **Ignatian Pedagogical Paradigm**. Ignatian Pedagogy is largely an unfolding of what experience, reflection and action might mean for the teacher who wants to teach faithfully in the tradition of Ignatius of Loyola.

The **Integral Pedagogical Paradigm** or **Ignatian Pedagogical** model is not a method which could be adopted only by Jesuits; it has an appeal, as it is the result of a serious search for a good model for developing integrated personality of children of any school anywhere in the world, irrespective of differences in culture, religion, socio-economic status, rural, semi-urban and urban situations.

To understand the meaning intended by these words experience, reflection and action, it is useful to understand the 'problems' faced by education today. There are at least two major problems.

The first problem arises out of the post modern world's shrinking of the educational agenda to view schooling as a kind of ladder to a career laden with status or financial reward. They have identified a number of "isms" that are antithetical to the aim of integral education. Secularism understood as devoid of spirituality, materialism, pragmatism, utilitarianism, fundamentalism, racism, narrow nationalism, sexism, consumerism, to name a few. The success of an integral

approach by the teacher can be measured by the extent to which he or she has managed to expand the educational agenda to stand against these forces which move against the formation of the educational goals of the society.

The second problem arises out of the inadequacies of the so-called 'two step' teaching model. The teachers who teach from 'two step' model unconsciously treat their students like sponges who passively soak up facts and figures presented to them. In this model, there is a one-way exchange of information between the teacher who 'knows', to the student who does not know'. In colloquial terms the 'two step' model can be summed up as 'chalk and talk' style of teaching. This style of teaching falls short of the Jesuit ideal for at least two reasons. Firstly, the higher order cognitive skills of understanding, application, analysis, synthesis and evaluation are not promoted. Secondly and more importantly, students who are taught by this model to become passive acceptors of the world as it is presented to them. These students are not challenged by their schooling to become seekers of truth who move out into the world to critically engage with it, nor are they challenged to become leaders who are agents for change based on a self-appropriated value system.

Given the above problems, one would expect Ignatian Pedagogy to provide a way for teachers to encourage their students to **become active in their learning and sensitive to the "humanising" elements of all they learn.**

This new paradigm the Jesuits have formatted is known by different names such as Ignition Pedagogical Paradigm, Reflective Pedagogical Paradigm or Integrated Pedagogical Paradigm.

The three key elements of this teaching model are **experience, reflection and action.** To these three central elements, the authors of Ignation Pedagogical Paradigm have added further two to create a model of teaching that begins with a clear understanding of the **context** of the group being taught and ends with a commitment to **evaluate** the effectiveness of the learning process. In actual fact, there is neither beginning or end in the learning process, rather a continuing interplay between the five elements of **context, experience, reflection, action and evaluation.**

Context : The teachers are encouraged to become as familiar as possible with the life experience of the students so that they will be better equipped to help the students in the process of learning. Since real and meaningful education always begins with the life experience of the learner, the teacher needs to understand

as much as possible about the actual context in which the learning and teaching takes place. There are many elements to the context for the teacher to ponder: The relationships with the family, friends, school, teachers, culture, norms and mores of the society, socio-economic and religion background, previous experiences of learning, the media influence on the learner, and so on. An understanding of this context of the students as well as the context from the teacher himself or herself comes will help the teacher in helping the students to learn better.

Experience : Experience is defined not as a mere activity in which the student has engaged in process of learning. It has to be viewed in broader and richer terms. It needs to be more than just a cognitive activity. Students need to be encouraged to do more than just know the material they study. They have to savour it. It includes knowing of facts, concepts and principles. It moves beyond such knowledge to stimulate affective ways of knowing (for example : intuition, imagination and the emotional responses the student has to the matter being learned). There are two reasons given for this insistence on the inclusion of an affective dimension to the learning process. Firstly, the whole person is called to growth - this includes the maturing of the mind, heart and will. Secondly and more importantly, they believe that Ignatian education has not taken place until such time as the student is moved into action. Students are not moved to act simply by an intellectual grasp of a piece of information. They are moved to act **"when internal feeling is joined to an intellectual grasp"** of the matter being learned. In other words, students need to feel something about what they learn if they are going to end up doing something about it.

Reflection : In some places, this pedagogy is known as "Reflective Education". This is an indication of how important reflection is in the learning process. Reflection is not presented as an "armchair philosophising" moment in education process, rather it is described as the type of reflection that leads to 'action'. When students reflect, the memory, understanding, imagination and feelings are harnessed to capture the meaning and essential value of what is being studied. The teacher with the help of probing questions, help them to reflect on the matter being studied, its relevance to life for himself and for society. The student having gained insight into the material, is encouraged to consider the implications for the ongoing research for truth, freedom and justice. Reflection is a formative and liberating process.

Action : The bottom line of this Pedagogy is never the word, it is always the act. Love, justice and peace is shown in deeds, not words. Education reaches its

climax when the student is led to action. Cognitive and affective responses have been stimulated in experience. The essential meaning and values implied in the experience have been drawn out in reflection and the student is led to a new commitment in action. It is not just any commitment that the student is led to, rather, whilst respecting human freedom, the educator encourages "a decision and commitment for better service for the community". The aim of Jesuit education is to develop leaders for service of the community. Actions are described at two levels "Interiorised choices" and choices externally manifested". Interiorised choices takes place when students, in light of all that has happened in experience and reflection, makes a commitment to conform their lives more closely to what is better for humanity. In time, the deepening of this commitment will impel the student to act to do something consistent with the new conviction.

Evaluation : Few teachers would argue with the need to measure the academic progress of their students from time to time. This model of pedagogy includes this type of evaluation but they also have other measurements in mind. This pedagogy is concerned with the development of the whole person. Periodic evaluation of students growth in attitudes, priorities and actions consistent with being a person for others is essential. The strategies for the teacher to measure this "well rounded growth" are needed. These strategies included between tutors and their charges, the use of student profiles, self assessment by student, goal setting activities and student journals.

The approach is spiral and not linear

While speaking of the context, experience, reflection, action and evaluation, one should not get the idea that these steps are linear or one after the other. It is a spiral process rather than linear steps. The educative process does not begin with context and proceed to experience, reflection, action in the linear fashion to evaluation. It is a spiral movement envisaged so that the teachers create the condition for an ongoing process where there is constant interplay between these five elements.

Strategies for teaching

This pedagogy has been eclectic from the beginning in its selection of methods for teaching and learning. All effective teaching methods are considered desirable "in so far as they contribute to the goals of education". A perennial characteristic of the model is the ongoing systematic incorporation of all sources which better contribute to the integral intellectual,

emotional, social, moral and spiritual formation of the whole person.

A large range of teaching methodologies is offered providing concrete strategies for the educators to facilitate the process involved in context, experience, reflection, action and evaluation. A whole range of strategies is offered to educators who want to come to terms with the context of the students they teach. One example given was that of student learning styles - a recognition that learning happens differently for one person to the next. Broad categories of learning style offered included visual learners : learning by reading or seeing the materials (40 - 50% of population). Auditory learners : learning by hearing the material (10 - 20% of population) and Kinesthetic learners : learning by physically interacting with the material - hands on (20 - 50%) of the population.

With regard to experience, the value of the traditional Jesuit technique of 'prelection' is given some prominence. This is a pre - reflection of the matter to be studied. In other words preparing the students to learn the matter. Here the teacher introduces a short account of the matter to be studied without short - circuiting the essential self activity of the student. When prelection is done well, the students have a clear understanding of the main lines the course/topic will take. They understand what they ought to be able to do (objective). Once they have completed the course/topic, they will be motivated to engage with the material, the students attention and interest will be caught.

The importance of the formulation and asking questions well is stressed so that the students are not only given factual and descriptive questions, but are challenged by questions that probe higher order skills like, evaluation, inferences, implications, cause and effect. Problem solving exercises, cooperative learning, small group process and peer tutoring are some other positive possibilities for experience.

To facilitate good reflection, probing questions, student journals, interaction with the teacher, use of case studies, simulation games, role play, debating and goal setting are found to be very effective.

Action strategies offered include projects and assignments, service experiences, essays, career choices and so on.

Conclusion : In short this pedagogy highlights the necessity of taking the context of students into account as well as need to engage the student actively in

learning process, particularly an engagement which catches up both the dimensions affective and cognitive of the student. It is never sufficient to view the teaching process as a transmission of a body of information. The educator encourages the student to develop a range of higher order skills beyond that of simply able to recall and repeat facts and figures learned by rote.

The vocation of being a teacher is graced with an even higher dignity than this when the commitment to accompany the student into freedom is recognised - a freedom where the student is able to commit him or herself for his own development as a fuller human being searching for excellence in his/her personality and as an agent of love, peace and justice in the human race.

COLOURS - A SOURCE OF JOY

Playing with colours is a source of joy for every child; especially the young children are attracted by colours. Given below are some common and easy activities where children can play with colours. While playing with colours; children learn about the colours recognition of colours, combination of various colours to produce other colours, names of colour. They also get opportunities to learn new vocabulary such as names of various things which have specific colours, develop their imagination, creativity, aesthetic sense and also develop fine muscle coordination which is very essential for writing and other activities which requires fine finger coordination.

Blow painting :

Objective : To give the children rich experience of colour blending.

Materials : Sheet of white paper, liquid paints of different colours, small spoons, straws and old sheet of news papers.

Method : The children are seated comfortably with enough space between each one and a news paper is spread in front of each of them so that the paints may not spill on the floor. A sheet of white paper is placed on the news paper. Each child is given a drinking straw to blow the colour. The teacher pours a few drops of one colour on each of the white sheet in front of the children. The children are asked to blow on this in different directions with their straw and spread the colour on the paper to produce any design they can make. Allow small groups of children to discuss what they find in their design. What shapes they can find in the pictures. Let their imagination go wild seeing and sharing about the things they can discover in their's and other's paintings. This will help them to imagine clouds, animals, birds, people, other objects in their paintings and talk about them. A lot of communication will take place helping language development. Now

the teacher puts a few drops of another colour on the same paper. Let the children blow these also on the same design they have made. Even though only two colours are put, the children will discover that now there are these two colours and a new colour which formed as a result of mixing of the two colours. New patterns and designs are formed. Let children share what they see and what they feel about their work with other children. If the children are interested add more colours and allow the children to experiment with them. These different patterns formed by different children will definitely bring wonder and joy in the hearts of children. Dry these designs by keeping them aside for some time. Write their name on their creations and display it in the class display board or wall.

Later on discussion in the class can be held on two colours combine to form a different colour such as red and yellow forms orange, blue and yellow forms green and so on.

Finger painting :

Materials : Newspaper, white paper, paints, white paper with shapes of animals, birds, human figures etc. drawn on it.

Method : The news paper is spread in front of each child to prevent the spilled colours on the floor. The white paper is placed in front of them. Two or three liquid colours are also placed in open containers. The children are asked to use their index finger to draw any picture that they want to make. When they have experimented sufficiently with their own creations ask them to explain their pictures in small groups. Now the teacher gives them paper with shapes drawn on them. The children are asked to fill these figures with different colours to give them realistic look. For e.g. : the shape of a fish filled with scales and fins and eye. This must be done with fingers.

Extension of the activity :

Instead of using fingers, the children can be provided with, combs, tooth brush, strings and other accessories can be used for printing.

Leaf printing :

Materials : Different leaves, paint, paper.

Method : Each child is given three or four leaves, paints and paper. The children are asked to paint the back of a leaf very thinly using brush, tooth brush or finger. No drops of paint should be on the leaf. Place a sheet of paper on top of the leaf and press on it smoothly. Take it out and dry. Make a number of leaf prints and this can be used for making different designs. Draw a tree on a chart paper and use these leaf prints to fill them with leaves.

Vegetable printing :

Materials : Vegetables such as lady's finger, potatoes, carrots etc. paint, paper.

Method : In the case of lady's finger, cut it horizontally and dip it in colour and press it on the paper. A good flower design can be obtained. This can be used for making borders for paper, to fill shapes draw on paper especially that of dresses using different colour a lot of beautiful pattern can be made. In the case of potatoes and carrots, cut them and on the cut surface, carve out different designs and can be used like rubber stamps for printing using different colours.

String painting :

Materials : Paper, string, paints, newspaper.

Method : Spread the newspaper in front of each child. Place the white paper on it. Cut few strings as long as half the length of your arm. Ask the child to hold one end of the string and dip it in the liquid paint and take it out. Make sure there are blobs on it. Drop this string on the paper holding the clean end. Take it out and drop again. Repeat it a number of times forming a lot of overlapping lines. Now take another string and repeat the same process with another colour. Surprisingly beautiful designs will emerge. Dry the paper and write the name of the child. Display it.

Extension 1 :

The threads with the colour is slowly moved on the paper to spread the designs. When different thread

with different colours are made to form, different pattern on the paper, beautiful patterns will emerge.

Extension 2 :

Fold the paper into two parts. Put the thread with colour on one part holding the clean end. Now fold the other part on to the thread. Place a book on top of the folded paper. With one hand press on the book. With the other hand, pull the thread out. Patterns pleasing to the eye will emerge.

Symmetrical figures :

Materials : Paper, paint, news paper.

Method : Ask the children to spread the news paper in front of them. Place the white sheet on top of it. Fold the paper into two equal parts. Open the paper and put few drops of colour on one part of the paper. Fold back the paper and press it with the hand. The colour spreads and form similar designs on both sides of the paper. Open the paper and put few drops of other colour one at a time and each time see what happens. The child can put different colours together in the beginning and fold the paper also to get beautiful designs.

Spray painting :

Materials : Tooth brush, colours, paper and other accessories such as leaves, paper cut out of the shapes of different animals, birds, human figures and other plain objects.

Method : Each child spreads a newspaper in front of them. Place a paper on it. On the paper place a leaf or a paper cut out of the animal or bird or human figure. Dip the tooth brush in the paint remove the flowing liquids and blobs by shaking it. Now with the index finger rub the brush so that the small bits of paint fall on the paper. Do it all over the paper making sure that the paint has spread evenly on the paper especially on the outside edge of the leaf or cut out. Slowly take the leaf away from the paper. The shape of the paper will be seen white while the outside is all coloured. Depending upon the child's taste any one colour or different colours can be used. If the outline of the shape can be cut out from a big sheet and use the outer part to cover the paper and spray the inside part, the child will get the object coloured with spray. There is no limit for a creative teacher to find interesting and innovative activities with colours. The children when they are allowed to play with colours develop imagination and creativity and aesthetic sense. So teachers, indulge yourselves with colours and make your and children's life really colourful.

Block printing :

Materials : Plastic bottle caps, wooden blocks, thick thread, paint, fevicol or any good adhesive, a soaking pad.

Method : Take a plastic bottle cap say 5 to 8 cms. in diameter. Spread some fevicol on it. Put the thread on it to make any desired design. You can make flowers, birds, animals, human figures, houses, objects or any beautiful designs. Be careful that the thread does not overlap or cross. Where ever there is overlapping or crossing cut the thread and proceed to put it across. This is to help the surface level of the design same. Allow it to dry. Now you are ready for block printing.

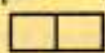
On a piece of wood, spread three or four layers of cloth tightly. Use drawing pin to fix it. This works as a stamp pad. Pour any one colour on it until it is wet like a stamp pad. The children are asked to press their design on this pad and press it on the sheet of paper in front of them. They will get a print of the design. Repeat printing the same design on the paper in one colour or in different colours to create more designs. For small children, the blocks of different designs and pads must be made by the teacher. Only printing is done by them. For elder ones they can go wild in creating their designs or monograms etc.

Colour dominoes :

Materials : A set of colour dominoes. This is made by a set of cards each divided into two parts as shown . Each part has two colours either painted or pasted. For example:-



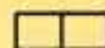
red yellow



yellow green



green blue



blue orange



orange pink

and so on.

Method : The children are then divided into groups of 5/6 and each group is given a set of cards. The children are then asked to make a chain where yellow should coincide with yellow, red with red and so.



R Y



Y G



G B

.....

Fine discrimination of colours :

Materials : A collection of green leaves.

Method : The children are made to sit in small groups and a collection of green leaves are provided to the group. They are asked to arrange the leaves from light green to dark green. The teacher can introduce the words, light green, dark green, bottle green and so on.

Materials : Sets of cards on which cloth piece of the same colour of different hues pasted on it. Clothes of different hues of the same colours are available in shops where they match the sarees.

Method : From small groups of children and each group is provided with a set of cards having different hues of the same colour. Ask the group to arrange them from lightest colour to the darkest.

FOOD FOR THOUGHT

Sometimes people say "I hate you"

And what it means is

"I want your attention SO MUCH

That if hate is the only way to have it

Then let it be hate"

"Why hate me ? What did I do ?"

And the simple answer is

"You ignored me when I cared about you"

FLOWERS ARE RED

The little boy went first day of school
He got some crayons and started to draw
He put colours all over the paper
For colours was what he saw
And the teacher said :

"What are you doing young man ?"
"I'm painting flowers !" he said.

She said "It's not the time for art young man
And anyway, flowers are green and red.
There's a time for everything young man
And a way it should be done !
You've got to show concern for everyone else
For you're not the only one".

And she said :
Flowers are red young man and green leaves
are green
And there's no need to see flowers any other
way
Than the way they always have been seen".

But the little boy said :
"There are so many colours in the rainbow
So many colours in the morning sun
So many colours in a flower ! And I see every
one".

Well the teacher said : "You're sassy,
There's a way that things should be
And you'll paint flowers the way there are,
so repeat after me

And she said :
Flowers are red young man and green leaves
are green
And there's no need to see flowers any other
way
Than the way they always have been seen".

But the little boy said :
"There are so many colours in the rainbow
So many colours in the morning sun

So many colours in a flower ! And I see every
one".

Well the teacher put him in a corner.

She said : "It's for your own good, Young man
And you won't come out till you get it right
And responding like you should".

So, finally he got lonely, frightened
thoughts filled his head

And he went up to the teacher

And this what he said he said
"Flowers are red young man and green leaves are green
And there's no need to see flowers any other way
Than the way they always have been seen".

Time went by like it always does and they moved to
another town

And the little boy went to another school
And this is what he found

The teacher there was smiling,
She said "Painting should be fun !
And there's so many colours in a flower,
So let's us every one !"
But the little boy painted flowers in neat rows of green
and red

And when the teacher asked him why, this is what he
said :

"Flowers are red and green leaves are green
And there's no need to see flowers any other
way
Than the way they always have been seen".

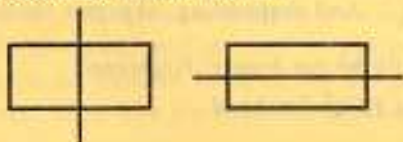
But the teacher said :

"There are so many colours in the rainbow
So many colours in the morning sun
So many colours in a flower ! And I see every
one".

THE ELUSIVE EQUAL PARTS

While teaching fractions one thing to be careful is that the objects are divided into equal parts as the number given in the denominator.

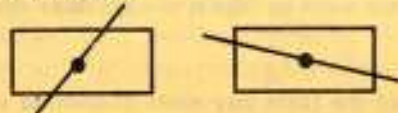
Let us consider $1/2$. Half means that the object is divided into two equal parts. How many ways can we divide a rectangle into equal parts? conventionally the teachers divide them as



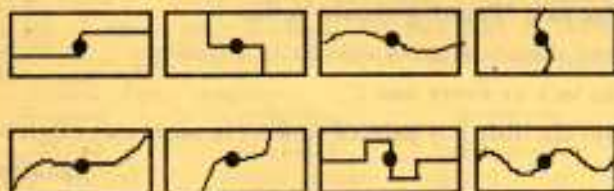
If we ask for more ways of dividing into equal parts, the children may show



Let us explore other unconventional ways of dividing into two equal parts.



i.e. any line passing through the centre of the figure also divides them into equal parts.

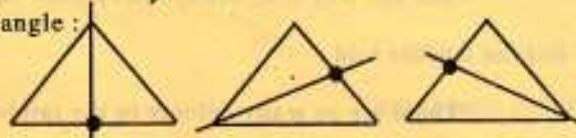


All the above figures are equal parts. i.e. we can divide an object into two equal parts in innumerable number of ways.

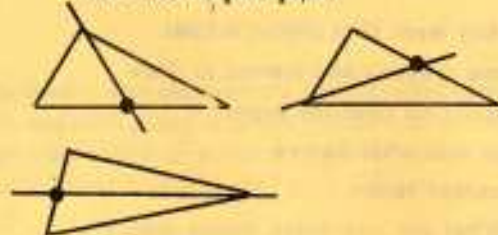
Consider a circle.



A triangle :

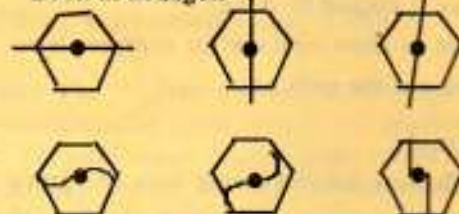


Are these equal parts



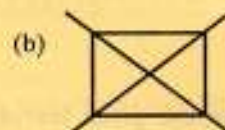
They are also equal in area. Hence they are also equal parts. In other words any line passing through the vertex and the mid part of the opposite side (media) of a triangle divides it into two equal parts.

Look at hexagon.

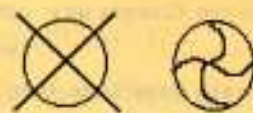


These are all equal parts. See the various possibilities of division into equal part.

In the case of dividing into four equal parts, again there are lots of possibilities.



Though these two are not similar pieces, they are equal in area. Hence they are also equal.



Let the children be given opportunities for dividing various shapes into equal parts. This will widen their understanding of fractional parts.

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